

quadcopter **1150** as shown in FIG. **10A**, or at a forward portion **1155F** of the frame **1155** of the quadcopter **1150** as shown in FIG. **10B**, or various other locations on quadcopter **1150** that allow for unimpeded projection of images onto the surface **1500** in the room. In some embodiments, the image output device **1140** may be movably mounted, such as, for example, gimbal mounted, allowing for essentially 360° adjustment of the projection direction, so that the projection direction may be varied based on an orientation of the quadcopter **1150** and a position of the available projection surface **1500** in the room. The examples shown in FIGS. **10A** and **10B** illustrate projection by the image output device **1140** in a forward direction and in an aft direction. However, the image output device **1140** may be capable of projection in numerous other directions based on a movable mounting arrangement of the image output device **1140** and/or projection components thereof. In some embodiments, the image output device **1140** may project onto the projection surface **1500** in the room while in flight, as well as when received on a perching device.

**[0043]** Herein, implementation and use of a mobile telepresence system has been described in terms of a meeting in a workplace, simply for ease of discussion and illustration. However, various implementations of a mobile telepresence system, as embodied and broadly described herein, may also apply to other venues, such as, for example, a medical professional consulting with a patient and/or another medical professional at a different location, an instructor providing instruction to student(s) at remote location(s), and the like. Benefits of a telepresence system, as embodied and broadly described herein may include, for example, reductions in travel expenses, reductions in environmental impacts, improved coordination and productivity, and the like.

**[0044]** While certain features of the described implementations have been illustrated as described herein, many modifications, substitutions, changes and equivalents will now occur to those skilled in the art. It is, therefore, to be understood that the appended claims are intended to cover all such modifications and changes as fall within the scope of the implementations. It should be understood that they have been presented by way of example only, not limitation, and various changes in form and details may be made. Any portion of the apparatus and/or methods described herein may be combined in any combination, except mutually exclusive combinations. The implementations described herein can include various combinations and/or sub-combinations of the functions, components and/or features of the different implementations described.

**1-20.** (canceled)

**21.** An aerial vehicle comprising:

- a frame;
- a propulsion system coupled to the frame and configured to propel the aerial vehicle in response to a command from a remote device;
- a screen pivotably coupled to the frame;
- an image output device movably mounted to the frame, wherein the image output device is configured to project an image onto the screen; and
- a controller configured to:
  - operate a communication module to communicate with the remote device.

**22.** The aerial vehicle of claim **21**, wherein the propulsion system includes a plurality of rotors each coupled to a respective portion of the frame.

**23.** The aerial vehicle of claim **21**, further comprising a coupling device that pivotably couples the screen to a forward end of the frame.

**24.** The aerial vehicle of claim **23**, wherein the coupling device includes at least one hinge, the at least one hinge comprising:

- a first bracket fixed to the forward end of the frame;
- a second bracket fixed to a top end of the screen;
- a shaft extending through the first bracket and the second bracket to couple the first bracket and the second bracket such that the screen is rotatable about the shaft relative to the forward end of the frame; and
- a stop mechanism that limits an amount of rotation of the screen about the shaft to within a predetermined range.

**25.** The aerial vehicle of claim **24**, wherein, in a neutral position the screen is oriented substantially vertically, and in a first position the screen is rotated in a first direction about the shaft such that a rear facing surface of the screen is rotated toward a bottom surface of the frame and positioned at a first side of the neutral position, and in a second position the screen is rotated in a second direction about the shaft, the second direction being opposite the first direction, such that a forward facing surface of the screen is rotated upward and positioned at a second side of the neutral position, and wherein the predetermined range is between the first position and the second position.

**26.** The aerial vehicle of claim **25**, wherein air flow during flight of the aerial vehicle causes the screen to rotate within the predetermined range so that the screen aligns itself in an aerodynamic position.

**27.** The aerial vehicle of claim **21**, wherein the screen has a unitary structure made of a foam material, including a semi-translucent, perforated display area surrounded by a rigid outer frame, a thickness of the display area being less than a thickness of the rigid outer frame, and wherein air can flow through the perforated display area during flight of the aerial vehicle.

**28.** The aerial vehicle of claim **21**, further comprising a speaker configured to output audio based on audio data, and wherein the image output device comprises a projector configured to project the image based on image data.

**29.** The aerial vehicle of claim **28**, wherein the controller is further configured to:

- control the projector and the speaker to output in real-time audio data and image data associated with a remote location, wherein the audio data and image data is received from the remote device via the communication module.

**30.** The aerial vehicle of claim **21**, further comprising: a microphone configured to receive an audio input; and a camera configured to capture an image input.

**31.** The aerial vehicle of claim **30**, wherein the controller is further configured to:

- control the communication module to transmit in real time image inputs received by the camera at a current location and audio inputs received by the microphone at the current location to the remote device located at a remote location, wherein the remote location is different from the current location.